

Minutes for Pond Water IM/IRA
Administrative Control Meeting
May 18, 1994

Meeting Minutes from May 4 Meeting

Gail Hill, DOE, started the meeting with an opportunity for comment on the minutes from the May 4 meeting. There were no great objections, but Dave Norbury, CDH, explained that a letter was en route to DOE related to a missing detail in the minutes. The minutes stated that water transfer from the RFP landfill pond could go forward only if it met stream segment standards, but they did not mention which segment. Norbury noted that Segment 4 of Big Dry Creek was the appropriate stream segment standard and that the forthcoming letter addressed the issue.

Dam Safety Procedures

Hill asked if there were any lingering questions or comments concerning the existing Dam Safety Procedures at RFP. Judy Bruch, CDH, wondered when the new Procedures would be available. Doug Murray, EG&G, explained that they are in procedure now, and that they would undergo review and concurrence after that. This procedure would take roughly 90 days. Hill asked for advance copy for the next meeting, since the only significant changes to the existing plan were the piezometer readings indicating action levels. This will be provided.

Proposed Activities

Cheryl Row, DOE, presented RFFO/Ecology Management Division's prospectus of items to consider in the IM/IRA development. She proposed the expansion of meeting attendees to include the cities of Westminster and Broomfield (the Cities) and the U.S. Fish and Wildlife Service (USFWS). The Cities are directly involved in the administration of the pond waters because their facilities must be able to accommodate discharges and manage waters received from RFP. USFWS should be invited because of their jurisdiction over the Fish and Wildlife Coordination Act, the Migratory Bird Treaty Act, the Bald and Golden Eagle Act and the Endangered Species Act, effected by the IM/IRA.

Row proposed that these parties be provided with technical papers on the complete operations of RFP ponds, and then briefed individually before attending the meetings. She proposed that they be briefed on system design, water quality and sampling protocols. The group felt that this was acceptable, but that it was important that the standards be determined before including these new parties. It was agreed, as a result, that water quality standards be the primary item of discussion at the next meeting.

Regulator Comments and DOE Responses to Draft IM/IRA

Bill Fraser, EPA, wished to address two items of DOE comment response simultaneously: "Sources of Contamination" with "Coordination with Other Activities." Fraser had concerns over the DOE references to the draft IM/IRA document that stated that the IM/IRA would cover everything downstream of NPDES permitted outfall. It was unclear if the area covered by the IM/IRA included or excluded the area between these sources and the ponds. Hill pointed out that the stated scope of the agreement was limited to *pond* surface water, not *all* surface water. This inconsistency was discussed at length by the group. CDH and EPA both explained that it seemed more efficient to address the source of pond pollutants than treat the pollutants after they reach a pond. EG&G and DOE had concerns that there would be problems with document/regulatory overlap when confronting a pollution source that was being handled under another document (such as another IM/IRA or ROD). In the end, the group concluded that the final IM/IRA would include procedures for identifying pollution sources, for sampling programs to track the source, for administrative controls and, if necessary, for determining ownership of response to the source.

This discussion was followed by a general clarification of DOE use of risk and risk analysis in the IM/IRA. Fraser felt that risk was not a relevant criteria, that risk is only used in the ROD process, and that only existing stream standards were relevant. Bruch emphasized that while some stream standards are based on risk, others are baseline and some are drinking water or aquatic life standards. Furthermore, EPA objected to the use of the term "Contaminants of Concern" (COCs), as that was also a term limited to the ROD process. In response, Hill felt some risk assessment was important for public understanding in the event that pond water does not meet stream standards but the exceedances are not of concern to the regulators. DOE is concerned that when the IM/IRA goes public, it could be construed as permitting releases without proper study. Also, Murray explained that the COC language was an attempt to simplify the sampling process and save money. Upon the conclusion of this discussion, the group agreed that the final document could include historical background stating the reasons for the IM/IRA in order to ensure public understanding of release conditions. Furthermore, the group concurred that a simplified pollutants list was also acceptable.

Action Items

- DOE to provide draft Dam Safety Procedure to CDH at May 25 meeting
- All parties to review DOE responses to comments not addressed at May 18 meeting for May 25 meeting
- DOE will provide references to NPDES discharge in final comment response
- DOE to revise references to risk in final comment response
- Invite Cities and USFWS representatives to June 8 meeting.

Next Meeting

Wednesday May 25, 1994, 9-11 A.M. at the EPA Region VIII office, Administrator's Conference Room (5th Floor, South Tower), in Denver.

STANDARDS AND WATER QUALITY PERFORMANCE GOALS

The following document outlines DOE's/EG&G's position with respect to selection of numeric standards for operational purposes and how water quality performance goals will be applied and evaluated under the auspices of the Pond Water Management IM/IRA.

WATER QUALITY PERFORMANCE GOALS

- Current Segment 4 and Segment 5 numeric standards adopted by the Colorado Water Quality Control Commission (CWQCC) will be used as the basis for assessing water quality for all parameters, and as a matter of comity, including radionuclides.¹
- "Compliance" with respect to Segment 4 and Segment 5 standards has no meaning outside their use as effluent limitations under a discharge permit. In their supplemental rebuttal statement filed with the Water Quality Control Commission on December 7, 1992, the Water Quality Division stated "From a regulatory point of view, compliance with instream water quality standards is not determined by instream sampling. Water quality is protected through discharge permits. Effluent limits may be established in discharge permits based upon water quality standards. Compliance is determined by whether the permit holder is exceeding

¹ To the extent that the Agencies seek to apply any radionuclide standards, DOE reasserts its position that state regulation of radioactive effluents for a nuclear weapons facility is preempted by the Atomic Energy Act, as amended. (See 40 CFR Part 122)

its effluent limits, not by whether water quality in the stream exceeds the water quality standards."

- Segment 4 and Segment 5 numeric standards will be applied as performance goals rather than effluent limitations, consistent with Paragraph 150 of the Interagency Agreement (IAG), and "The Basic Standards and Methodologies for Surface Water" 3.1.0 (5CCR1002-8). Stream standards are not self-enforcing, and do not become enforceable effluent limitations until they are adopted as such under a discharge permit. Since no discharge permit is associated with this IM/IRA, enforcement of water quality standards under this IM/IRA will be consistent with CERCLA guidance and the IAG.
- DOE/EG&G recognizes that Segment 4 and Segment 5 standards may eventually become ARARs, pursuant to Part 15 of the Interagency Agreement. Since ARAR's are being developed on a sitewide basis, the term "potential ARAR", or "benchmark", will be used in describing Segment 4 and 5 stream standards. Once adopted as ARAR, and pursuant to paragraph 150 of the IAG, DOE/EG&G agrees to attaining ARARs "to the greatest extent practicable." This is also consistent with the manner in which benchmarks are applied to operations at Operable Units 1 and 2.

OPERATIONAL PERFORMANCE GOALS

- Since an instantaneous grab sample is not representative of long-term water quality, the decision whether to treat, transfer or discharge water from a pond will not be based on a point value comparison of analytical results with Segment 4 or Segment 5 standards.

- The decision to discharge water to Segment 4 will be made as follows: If a single parameter in a sample taken for operational purposes exceeds Segment 4 standards, but the average value for that parameter (including the exceedance) over the three month reporting period is less than the Segment 4 standard, then this water will be discharged. This approach to operational performance recognizes the fact that most of the Segment 4 and Segment 5 water quality standards are either chronic or ambient-based. Chronic or ambient based standards reflect desired average water quality and anti-degradation goals over the long-term.
- Even if the evaluation described in the paragraph above does indicate that a quarterly exceedance will result, this does not automatically mean that treatment will be initiated. The decision to treat or not will be based on a determination of whether treatment is "practicable" consistent with CERCLA guidance and the preamble to the NCP, and will be based on the specific constituent, the specific concentration involved, and the ability and effectiveness of current technology to treat for that contaminant. Per the preamble to the NCP, a determination of practicable involves consideration of costs, technical feasibility, and community acceptability.

DOE/EG&G proposes to prepare a list of "treatment trigger levels" on a contaminant specific basis. These trigger levels will be established consistent with the methodology employed in typical NPDES permits, and will cite other water quality standards other than Segment 4 and Segment 5 standards. For example, heavy metals above acute aquatic life standards will be treated; however, heavy metals above Segment 4 standards but below acute aquatic life standards will be discharged.

SEGMENT 4 PERFORMANCE GOALS

- The points at which discharges to Segment 4 will be evaluated will be the effluent from outfalls of Ponds A-4, B-5 and C-2.
- Performance will be determined by taking a weekly grab sample during discharge, determining the mean value for any parameter over a three month discrete time frame, and comparing the three month mean value to the Segment 4 standard (point value). Evaluating weekly grab samples over the proposed quarterly time frame is more representative of long term water quality, and allows a more extensive monthly or quarterly list of parameters to be sampled for during the same reporting period.
- Daily grab samples composited weekly will be taken for plutonium , americium and uranium during discharges, per DOE 5400.1. These samples will be used exclusively to evaluate radionuclide concentrations against Segment 4 standards, and will use the same average method described in the paragraph above.
- A "short-list" of parameters will be developed for weekly discharge sampling events consistent with Section 3.1.15(5) of the basic regulations, which states "dischargers will not be required to regularly monitor for any parameters that are not identified by the Division as being of concern."
- Weekly, monthly and quarterly grab samples on discharges from Ponds A-4, B-5 and C-2 will be reported quarterly.

- The success with which Segment 4 performance goals are being met will be evaluated statistically, rather than as "not to exceed" point values, consistent with CWQCC methodology and the manner in which effluent limitations are established for typical NPDES permits.

Of the 29 pollutants for which effluent limitations are established in the Draft NPDES permit for Rocky Flats (Table 8), 24 are based on Colorado water quality standards. Of these 24, twenty-one have set effluent limitations based on 30-day averages.

SEGMENT 5 PERFORMANCE GOALS

- If Segment 5 standards are not being met, the sources contributing to higher levels will be identified, characterized, and otherwise addressed through the appropriate IAG mechanism, or the NPDES permit. The success in achieving water quality performance goals within Segment 5 will be determined by calculating the 85th percentile of analytical data collected over a rolling three year period, and comparing this 85th percentile value to the Segment 5 stream standard. The rolling three year period will be taken as the three calendar years preceding the date of any required summary report.
- Samples taken for operational purposes (such as pre-discharge samples) will be included in the database to determine the success in achieving Segment 5 water quality performance goals; however, samples taken as part of OU5 and OU6 characterization efforts will not be included in the database.

- Evaluation of Segment 5 water quality against Segment 5 performance goals will be done using a monthly "short-list," supplemented by more extensive quarterly and annual sampling efforts. Segment 5 water quality reporting will be quarterly.

It is DOE/EG&G's specific intent to protect the health and welfare of the public and the environment, and to maintain and promote good water quality, both in the ponds and on discharges from the ponds. DOE/EG&G believe the above proposal meets these objectives, within the framework of a workable and efficient operations plan.

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Pond Water Management IM/IRA
Administrative Control
Meeting
May 25, 1994
Draft Agenda

Meeting Minutes- 5/18/94

Additional Consolidated Comments & Responses

- Water Quality Performance Goals
- Spill Control
- Evaluation Process
- Evaluation Criteria
- IM/IRA Process

Summary of Issues Discussed

- Sources of Contamination/Coordination with Other Activities
- Risk Analysis

Draft Schedule

Next Meeting's Agenda